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Report on
Translation of Soviet-Bloc Scientific and Technical Literature

THE REVOLUTION IN MILITARY AFFAIRS

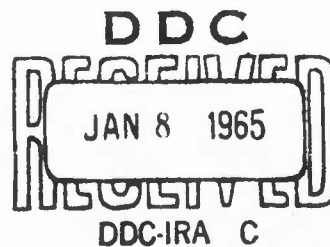
~~Special Translation~~

(15) by V. Sokolovsky and M. Cherednichenko

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FOREWORD

This report is a verbatim translation of the following two-installment article:

Sokolovskiy, V. (Marshal of the Soviet Union), and M. Cherednichenko (Major General). The revolution in military affairs, its significance and consequences. ~~Military art at a new stage.~~ Krasnaya zvezda, ~~25 August 1964~~, pp. 2-3, and 28 August 1964, ~~pp. 2-3~~.

[First Installment]

Following the introduction of new means of armed struggle the most spectacular revolution in history is now taking place in the methods of armed struggle, in military art.

Our military-theoretical literature and articles published in periodicals frequently broach the problem of the essence of contemporary military art and of the revolution by changes in the methods of armed struggle. We should like to communicate our considerations on this subject, which may or may not coincide with views and opinions which have been voiced by other comrades. The military reader will naturally notice this and we assume he will adopt a critical attitude toward our ideas.

What is military art? The view is widespread among many bourgeois military theorists that military art is the skill of the military leader and the manifestation of his military gift--that is, the subjective aspect is exaggerated. It is fully understandable that such a view on military art has nothing in common with a scientific view. Some military theorists have reduced military art to the theory of preparing and conducting armed struggle or to the art of war planning. Others, on the contrary, have examined only the effective, practical side of military art. These are one-sided approaches to the essence of military art.

In our opinion a definition of the term military art must make clear the following features: The achievement of victory in war, in an armed struggle on the basis of effective use of the available forces and means, is the main objective of military art. War is not a spontaneous process, and planning and a high degree of organization are required to wage it. Lenin said that war was not a toy and that waging a war was most difficult and dangerous, that war was an art.

Military art is war in action, the movement of millions of people, and the subordination of all forces and means to the aims of an armed struggle. Military art is above all material power. Military art is unthinkable without theory. The theory of military art constitutes a most important component of military science and is a force which mobilizes military consciousness. But military art is also the mastery and talent of the military leader and of every general, admiral, officer, sergeant, soldier, and sailor. In our time military art requires that soldiers have a thorough and comprehensive training; a knowledge of mathematics, electronics, physics, and chemistry; a high degree of technical erudition combined with tactical, operational, and strategic preparedness. Military art has a very specific feature. It comprises a wide range of problems, the most important of which are the following:

The planning of military actions; the organization of the armed forces, the forming of troop groupings and their comprehensive supply; the determination of the methods of conducting an armed struggle, the art of using the available forces and means for the achievement of victory in war--the implementation of the tenets of strategy, operational art, and tactics; the determination of the forms and methods of control of armed forces in the course of military action.

Let us examine these problems of military art somewhat more closely: The planning of military actions represents one of the most complicated and responsible tasks of military art. This problem has always been at the center of attention of the military leaders of any country. The experience of history teaches that a successful course of military actions, particularly at the onset of war, depends to a considerable extent on the art of planning military actions, on the skill of a country's political and military leadership to realistically assess the enemy and their own possibilities, and on the skill in exploiting these possibilities in case of war for insuring victory over the enemy. With the emergence of new means of struggle the role of planning in respect to the successful course of a war has sharply increased.

The following must be mentioned here: By its social nature as a socialist country the USSR is objectively bound only to plan for the development of the national economy in the interests of communism's victory and for the creation of an abundance of material and spiritual goods. The Soviet Union does not need war for this, but rather the peaceful coexistence of states with different social systems; not an armaments race, but universal and complete disarmament. However, as is known, the reactionary imperialist forces have not abandoned their designs of destroying the USSR and the other socialist countries by means of war. The military preparations of the imperialist powers are directed against the USSR and the entire socialist camp. It is precisely this that forces the Soviet Union to plan for the repulsion of imperialist aggression.

The nuclear-rocket weapons available in the Soviet Union make it possible to inflict a crushing defeat on any aggressive coalition, and in addition, within a short time. This has made it possible to carry out detailed planning for the repulsion of aggression, for the complete rout of the enemy, and for the achievement of war objectives, should an aggressor attempt to unleash aggression.

Planning for the repulsion of aggression has become immeasurably more difficult than it was in the recent past. Now it is not only necessary to determine the main aggressive countries and the main theaters of military actions, but also the main areas on the territory of the coalition of enemy states where the objectives are located that make up the military, economic, and political power of the enemy coalition and that are destined for destruction by nuclear strikes in case of aggression. Therefore the planning of nuclear strikes must be conducted with the understanding that within a short time the complete wrecking of the aggressor's economic and military power is insured with a minimum quantity of nuclear ammunition. It is also necessary to determine methods for the actions of conventional forces and means under conditions of large-scale destruction and high levels of radioactive contamination.

The determination of the quantitative structure of the armed forces in peacetime, and particularly in time of war, the determination of the principles of the organization of the armed forces and of their organizational structure and technical equipment, of the principles of the creation of reserves of armaments, military technical equipment and material means, and the principles relating to the organization of comprehensive supplies for the armed forces in time of war, represent very responsible tasks. All these and other problems are solved on the basis of the military doctrine which has been adopted in the state concerned with a consideration for the

the parties can use their main stocks of nuclear weapons accumulated in peacetime, will be of decisive importance for the course and outcome of the entire war. It is entirely possible that the war may end at this stage, since after an exchange of nuclear strikes further military actions will be rather unnecessary. But theoretically it may be assumed that the war will continue after the initial exchange of nuclear strikes. Let us say that one party retains the ability to conduct offensive action and the other to conduct defensive action. The war may enter a new phase. At every stage the armed struggle will comprise actions of all types by armed forces that have been coordinated under a single plan and under a single leadership, actions aimed at solving the current military, political, and strategic task. Thereby, the strategic nuclear forces, primarily the strategic rocket troops, will constitute the main force.

An operation is the most widely used specific form of armed struggle. In our view, under modern conditions an operation should be defined as organized military actions of branches of troops, of operational groups of units, and of army-level units, which are conducted according to a single plan and aimed at the solution of operational and strategic tasks. The following types of operations may be distinguished: Strikes of the strategic rocket troops and of rocket submarines and operations of the long-range air force, which in substance acquire the nature of operations of the strategic nuclear forces; strategic offensive operations in the theater of military actions; operations of the ground troops--offensive and defensive operations; airborne operations; and naval operations.

Finally, nuclear-rocket strikes, nuclear air raids, and combat will constitute widely used massive forms of armed struggle in the way of organized actions of crews, details, units, and groups of units of all branches of the service. Military art has been called upon to work out these and other specific forms of struggle. Military art has also been called upon to constantly perfect the control of troops. Troop control is the most important duty of the military leader, commanding officer, commander, staff, political organ, staff officer, officer, general, and admiral. Control as a specific activity of the people has its own methods and technical equipment. Control methods are devices in the work of the command and staff related to the leadership of troops. The technical equipment of control consists of means of communication, detection, direction, navigation, means for the execution of calculations, for the reproduction and recording of given situations, and for the mechanization of the control work of the commander and staff officer. To control troops successfully every military leader, commander, and staff worker must know the methods of control and must study and assimilate the technical equipment of control. Leadership of people, of the masses of servicemen--this is the main feature in control. To lead the troops means to amalgamate them under a single idea, to organize their actions, and purposefully direct these actions toward the accomplishment of combat tasks.

Under modern conditions troop control must be strictly centralized, but at the same time it must not chain the initiative of the commanders and troops. Successful control of troops, forces, and means is now possible if the control organs possess modern technical equipment; high-speed communication means: television, radar, navigation, and range-finding apparatuses; computers and electronic calculation equipment; means for the automatic transmission and reproduction of the situation; technical equipment for the fast reproduction in quantity of maps, plans, and operational

documents; means for the mechanization of all the main troop control operations of the commanders and staffs.

Military art is divided into three integral parts: Strategy, operational art, and tactics. Military strategy in the literal sense of the word denotes the leadership of troops and the use of the armed forces in a war. It includes the study, research, working out, and implementation of problems related to preparing for war and to the waging of war generally. Waging a war comprises the analysis of the nature, essence, and characteristics of war as well as the determination of measures related to preparations for the repulsion of aggression. Military strategy is the working out of the principles of organization of the armed forces, the principles of supplies of technical equipment and material means, and the principles of planning for military action. It is also the computation of calculations of the forces and means required for waging war, the determination of the objectives of an armed struggle for the entire war or for various stages, and the determination for the methods of conducting military action in order to attain these objectives. Military strategy also deals with problems related to the coordination of actions of various service branches and to the working out of principles for the leadership of armed struggle. Strategy is put into practice in the conduct of strategic operations, in the actions of the multimillion armed forces, and in the practical actions of supreme headquarters, military leaders, and staffs.

Strategy has become the main, decisive part of military art. Strategic success determines the outcome of combat, of an operation, and of the entire armed struggle. Strategy and the strategic leadership have at their immediate command, means so powerful that with their assistance, it is possible to accomplish military tasks without conducting numerous battles and operations in the conventional sense.

Under the present conditions the successful waging of war depends mainly on the state of strategy, on the working out of forms and methods of the strategic employment of the armed forces--primarily of the strategic nuclear forces--and on the methods of strategic leadership of the armed forces. This is why at the present stage the working out of problems of Soviet military strategy has acquired first-rate importance for preparing the armed forces and the entire country for the repulsion of aggression. Operational art is an intermediate part of military art, a part which lies between strategy and tactics. It does not deal with war as a whole but with the solution of several integral or intermediate problems of armed struggle for the achievements of the strategic war aims. Operational art determines the methods of preparing and conducting military actions of the branches of the armed forces and of their operational army-level units. The operation represents the basic form of operational employment of every branch of the armed forces and of their army-level units.

Some features taken from strategic forms and moves will repeat themselves in this element on a miniature scale but there will also be specific features. The operational art of the rocket troops, for example, must deal with the determination of the methods, forms, and maneuvers of the employment in combat of operational organizational units and with the work of their commands and staffs.

Striking a nuclear-rocket blow will constitute a serious operation for every one of them, an operation which must be comprehensively prepared and

insured and which must be carried out at a command or signal from above; accurate fulfillment of the task must thus be insured.

It appears to us that a distinction must be made between operational art of the strategic rocket troops, the troops of the country's defense against air attacks, the land troops, the navy, and the air force. Operational art is concerned with every branch of the armed forces separately and with their operational army-level units; it is the field of the operational echelon of command of the armed forces. Throughout the entire operational art, the operational art of the strategic rocket troops as well as that of the troops of the country's defense against air attacks have now become the main feature. But the operational art of the land troops, the navy, and the air force still is important as previously.

Tactics is the initial part of military art. Modern tactics have also become considerably more complicated and have acquired new content. Nuclear-rocket strikes, air force-nuclear strikes and combat--that is, actions of details, units, and groups of units of all branches of the armed services--constitute the main form of tactics.

Despite the increase in the role played by strategy in achieving the aims of war, operational art and tactics remain important integral parts of military art. They determine more specific forms and methods of employing armed forces in a war than does strategy, and direct the efforts of all details, units, groups of units, army-level units, and armed forces branches toward achieving the strategic war aims.

The division of military art into three integral parts--strategy, operational art, and tactics--is a purely conventional matter. It is very difficult to find a clear-cut distinction between them, since they are closely linked and mutually dependent. The task consists in the act that the methods and forms of the strategic, operational, and tactical use of the armed forces for the achievement of the war aims in the event of war are constantly perfected.

[Second Installment]

Working out new methods of conducting an armed struggle constitutes the central problem of modern military art. The most far-reaching changes, which are revolutionary in the full sense of the word and which were caused by two very important factors, have taken place in this field: The radical military-technical reequipment of the Soviet armed forces and the entry into the army and navy of servicemen who are far better prepared in all respects than previously.

What do the revolutionary changes in methods of conducting armed struggle amount to? Above all, the objective of the armed forces' actions as well as the direction of their main efforts have changed. Classical military art was based on the fact that the armed forces, formation of land troops, of the air force and of the naval forces in the theaters of military action, were the main objectives of the struggle. An armed struggle implied that mutual destruction of the armed forces in the theaters of military action --on land and sea--represented the only means of achieving victory in the war. The situation has radically changed now. The front line which is filled with troops no longer constitutes an obstacle to rockets with nuclear warheads, nor does distance play its former role. The state administration system, the economy, strategic rocket weapons, and the armed forces--all this now has become susceptible to new means of struggle. The existence of atomic and thermonuclear warheads and of carriers for these warheads make it possible to instantly destroy any objects on enemy territory and even entire states. Nuclear-rocket strikes against the enemy are the most rapid and reliable means to victory in a modern war.

The imperialist military ideologists consistently profess that in principle thermonuclear war is not at all different from all other wars, with the sole exception that losses will be much heavier. Quite a bit of talk is taking place about nuclear wars that can be "regulated" and about the employment of nuclear weapons against military targets only, or only against the armed forces. The concept of a nuclear war that can be regulated is demagoguery and hypocrisy on the part of the imperialist military circles.

The aggressive imperialist forces do not intend to employ their nuclear weapons only against military objectives, in fact this is even impossible because military objectives are located close to populated areas. They plan to employ these weapons above all for strikes against cities, the economy, and the population of the socialist countries, naturally as well as against rocket, air force, and navy bases and against groupings of army forces. Military theorists and leaders, particularly U. S. Secretary of Defense McNamara and French Minister of Armed Forces Pierre Messmer, are openly talking about this. The practical measures of the imperialist states are aimed at this.

The center of gravity of an armed struggle is being shifted to the territorial interior of the contending countries although a fierce armed struggle will also be conducted in the theaters. The strategic rocket troops have become the main, most reliable force; they will accomplish the main tasks of war.

The general formula for conducting a thermonuclear war will become specifically manifest depending on the situation, on which aggressor in particular unleashes war, how he does it, where the main enemy is, and so forth. It is not necessary to have troops enter all areas for the occupation of the enemy's territory. The strategic rocket troops can also solve tasks independently in a nuclear war. They are capable of inflicting such a powerful blow on any area that the stationing of troops in that area will appear unnecessary and even impossible.

The nuclear-rocket weapons as well as other new means of struggle have sharply increased the possibility of a surprise attack. But surprise is not fateful under present conditions. The possibilities of a timely detection of an impending attack are growing.

The initial period is of particularly great importance in a modern world war. The military leaders of the imperialist bloc are planning to "expend" the main bulk of nuclear charges in the first three days of the war and thus predetermine its outcome in their favor. The Western military theorists hold that this will be the very beginning of a world thermonuclear war. In this period it has been envisaged to conduct a so-called nuclear offensive or air-space operation, which is being discussed more and more widely in the foreign press. Then, depending on the radiation situation, a shift to attacks by land troop formations or the implementation of measures for eliminating the results of nuclear strikes is being planned. In their opinion this will already be the subsequent period of the war.

Thanks to the farsighted policy of the Communist Party and the Soviet Government, the Soviet Union possesses everything it needs to wreck the aggressive plans of the imperialists at an early stage of the war. Modern means of detection and warning insure the timely striking of a powerful nuclear counterblow, the reliable repulsing of an enemy surprise attack, and the wrecking of his criminal schemes.

The counterblow--this is the main content of the early stage of a thermonuclear world war. Evidently the strategic rocket troops as well as rocket submarines and the longrange air force will be the chief means of delivering a nuclear counterblow. Operational-tactical rocket troops, the frontline and naval air force, rocket-carrying surface vessels as well as coastal rocket-launching installations of the navies can also be enlisted for the counterblow. The actions of all forces and means must be conducted according to a single plan and under a single strategic leadership.

Simultaneously with a nuclear counterblow operations may be begun by the forces and means of the antiaircraft and antirocket defense. These forces have been called upon to repel the enemy's rocket and air force attacks and to protect the population, the cities, the economy, and armed forces groups from destruction by nuclear weapons. Following the counterblow, airborne landing forces can be dropped immediately to take advantage of the results of the nuclear strikes and, depending on the radiation situation, the land troops will shift to the offensive in order to complete the rout of enemy troop groups that have remained intact in the theaters of military action.

At the same time, effective military action will evolve in the oceans and maritime theaters with the objective of destroying the enemy's navy, of striking nuclear blows against coastal facilities, of disorganizing sea

transport, and of cooperating with the land troops in conducting operation in maritime sectors.

All these sections will make up the contents of the initial stage of a world war. The fact that effective, resolute military actions with the involvement of a maximum number of ready forces and means and with the employment of the nuclear weapons which have been accumulated in peace time will be conducted right from the start of the war will be a distinctive characteristic of this stage. The initial stage of a world war will be a period which can predetermine the eventual outcome of the entire war. In this stage an armed struggle will be most destructive and violent. In this connection the maintenance of a high degree of constant combat readiness of the armed forces, particularly of the rocket troops and the troops of defense against air attacks, is now acquiring particular importance.

But the problem of the duration of a war must evidently be solved in a different manner. Time will be of decisive importance for victory in a new world war if the imperialists should unleash one. Tasks which in the past were accomplished in months and years will be accomplished in the course of minutes, hours, and several days in a nuclear-rocket war. From this it is an indisputable conclusion, in our opinion, that a thermonuclear war cannot last long. Hence it is necessary, in our opinion, above all to make preparations for a short war.

At the same time it is impossible to exclude the possibility of the outbreak of a relatively protracted war. This may apply to a war in which nuclear weapons will not be used--for example, a local war which is capable of growing into a worldwide conflict--therefore the preparation for a relatively protracted war must not be neglected.

The determination of the methods and forms of employing strategic rocket forces in a war constitutes a completely new and complex matter. In the United States the strategic rockets, the strategic air force, and the nuclear-propelled rocket submarines are in substance combined into a single strategic force which is earmarked for a world thermonuclear war. The actions of these forces pertain to the air and space operation. It is termed an air operation because the strategic air force--as well as the carrier air force and the tactical air force--are participating in it, and it is named a space operation because intercontinental rockets are used in it.

The Soviet Union is a resolute opponent of the use of space for military purposes. The term "air and space operation" is not suitable for a description of the actions of our strategic nuclear forces. We are forced to prepare forces for counteractions against imperialist aggression, that is, to determine the targets for the employment of these forces, to fix the objectives for strikes against enemy territory, and to prepare certain definite means. In case of aggression these forces will inflict nuclear-rocket blows and air force-nuclear blows which will be of a purposeful and well-organized nature. In essence this will be an operation of a strategic scale--an operation of the strategic nuclear forces.

Counterblows of the operational-tactical nuclear forces will also constitute an integral part of these operations. Blows can be inflicted on a vast number of objectives and areas--in practice on the entire territory of the countries belonging to aggressive imperialist military blocs.

It is difficult now to foresee the outcome of such operations with absolute certainty. It is entirely possible that many states, including large ones, will cease to exist even in the first few hours of the war.

The very complex problem also emerges of the methods by which strategic blows should be inflicted by the strategic forces. It is necessary to reckon with the constantly increasing possibilities of antirocket defense. McNamara stated at a Senate committee session that the U. S. intercontinental rockets must be fired in salvos to overcome the enemy's defense against air attacks and that a great number of rockets must be launched simultaneously, but the Soviet Union is capable of releasing a no-less powerful salvo of its own strategic rockets, and more than a single one, to return the salvo of an aggressor's strategic rockets.

Following the rocket salvo, the long-range bombers will deal their blows. The actions of the long-range air force will acquire the pattern of an air operation. But the methods by which such an operation is conducted will be considerably different compared with the past war. The existence of "air-to-ground" and "air-to-ship" rockets with powerful nuclear warheads will change the tactics of actions of the long-range air force. The necessity of flights of great masses of planes in one formation for the accomplishment of combat tasks no longer arises. In our opinion the missions will be carried out by small groups consisting of rocket-carrying planes and supply planes and even by single aircraft. Rocket-carrying planes will deliver their blows primarily from maximum ranges without entering the zone of the enemy's active antiaircraft defense. Subsequently long-range bombers armed with bombs with nuclear warheads can strike their blows. The enemy's antiaircraft defense which may not have been completely suppressed by the rocket attacks, as well as complex radiation conditions on the flight courses of the aircraft, may exert a weighty influence on the methods of action of the long-range bombers.

The actions of the troops of the antiaircraft and antirocket defense will be of great significance for achieving the war aims. Recently the troops of the country's antiaircraft defense were completely reequipped with new military technical equipment.

The actions of the troops of the antiaircraft and antirocket defenses will be directed at wrecking the enemy's air and space operation, at the complete destruction of rockets and airplanes which are trying to penetrate it, and at insuring the vital activity of the state and combat readiness of the armed forces. These actions will imply the following: Together with rocket launchings and with the takeoff of planes, the bracketing of targets, target tracing, and constant tracking of the active means and their guidance to the targets will be implemented.

Various types of technical equipment are used for this purpose: Radio-electronic equipment, radiotechnical equipment, radiolocation equipment, infrared technical equipment, and so forth. In addition, the active antirocket forces and means which intercept and destroy ballistic rockets in various sectors of their trajectories will come into operation. Even now the development level of antirocket means makes it possible to pose and successfully solve complex problems such as the destruction of the enemy's attacking ballistic rockets.

Then the forces and means of antiaircraft defense will come into operation. Long-range antiaircraft complexes and fighter planes are capable of intercepting and destroying planes and self-propelled missiles at the remote approaches to defended areas or state borders even before the release of rockets of the "air-to-ground" type by these planes. Airplanes and self-propelled missiles which have broken through will be destroyed by fighter planes and antiaircraft rockets on the flight courses of the target or in the areas of the defended objectives. The high degree of efficiency of antiaircraft combat makes it possible to successfully solve problems of destroying all the enemy's attacking aircraft or winged rockets.

In the course of operations the combat activities of the country's antiaircraft and antirocket defense will be distinguished by a high degree of rapid and continuous activity. It is important to insure that the enemy's airplanes and rockets be subjected to continuous action up to their complete destruction and under any conditions. This can be achieved by the accurate cooperation of all forces and means.

NATO, the aggressive imperialist bloc, is maintaining large formations of land troops and tactical air forces in a state of constant readiness, equipping them with nuclear weapons and training them to conduct military actions under conditions in which nuclear weapons are used. A nuclear blow will be inflicted on these formations should a war be unleashed by an imperialist aggressor. Subsequently, resolute offensive actions of land troops and of the frontline air force will develop for the final rout of the enemy's troops in the theater, for the seizure of the enemy's territory, and for barring invasion by the aggressor's troops into the territory of the socialist countries. Offensive operations of a strategic scale--strategic offensive operations with the participation of some army-level units of the land troops or groups of units or of army-level units of other branches of the armed forces--will develop in the land theaters of war. It is not out of the question that in some directions defensive actions will be used as an enforced and temporary type of military action.

Nuclear weapons, delivered by means of medium-range rockets and long-range planes, as well as by means of operational-tactical rockets and the frontline air force will become the main means of an armed struggle in the land theaters of war. Tank and motorized rifle army-level formations and groups of units will exploit the results of nuclear attacks to complete the routing of groups of enemy troops and to penetrate deep into his territory. The enemy's nuclear means, his tank, airborne, and motorized rifle groups of units and units as well as infantry formations will be the objectives of an armed struggle in the theater of war.

The absence of continuous frontlines will be a typical feature. Military actions will simultaneously expand over a wide area both along the frontline and in depth; they will be distinguished by high speeds and degrees of troop maneuverability and by great fierceness. The troops will have to operate in an environment of vast destruction, conflagration, floods, and high levels of radioactive contamination of the terrain.

Something must be said about the operational-tactical rocket troops in particular. They cannot be treated like means of fire support for the troops, like the artillery. They are the main instrument in the hands of the senior and lower echelon commanders by which they accomplish the main tasks of combat or of an operation, such as the destruction of strategic-rockets, nuclear means, and groups of units which have remained intact after

the strikes of strategic rockets on concentrated areas, in zones of deployment, or in combat during attacks or defensive combat, the destruction of command points, rear bases, and so forth. Nuclear-rocket strikes--either massive, in groups, or singly--will be the main method of employing operational-tactical rocket troops. Methods suitable for employing artillery, such as artillery preparation for an attack and artillery support of advancing troops--fire barrages, successive concentrating of fire--are unsuitable for this new type of troops.

The frontline air force will play an important role in the armed struggle in the theater. It is capable of destroying the enemy's air force, rockets, artillery, antitank forces, and manpower by using nuclear weapons and conventional means of destruction and of accomplishing tasks relating to the antiaircraft defense, reconnaissance, and the transportation of troops by air. The outfitting of the frontline airforce with supersonic jet aircraft which are armed with "air-to-ground" and "air-to-air" rockets has radically changed the tactics of this air force. The sorties of vast masses of airplanes as well as the protracted "hovering" of planes over the battlefield have now passed into history. Flexible actions of small groups, pairs, and single airplanes operating at low altitudes and using complicated methods of delivering blows--by nose--diving and so forth--have replaced them.

The tactics of tank and motorized rifle troops is also changing. Attacks will be primarily conducted by tanks, armored troop carriers, and even by helicopters, and will develop in the main direction. Attacks by infantry formation will be a rare event. In view of the fact that an enemy nuclear strike will constantly threaten the attacking troops, they must operate in a well dispersed manner, must maneuver, in essence must be always on the move, must constantly keep ready their means for protection from blast radiation and fallout, and must use their vehicles and the irregularities of the terrain against shock waves. During combat actions these troops will complete the rout of enemy formations that have been struck by nuclear strikes. Simultaneously they must be ready to smash separate enemy garrisons with conventional means of destruction.

Airborne landing forces dropped behind the enemy's lines from helicopters will be widely used. Motorized rifle units and details can be used as such landing parties. This will be a special kind of attack by air, another new feature in modern military art.

The role of airborne troops in accomplishing tasks related to the armed struggle in the theater of war will increase sharply. These troops are capable of immediately exploiting the results of nuclear strikes. Opportunities are emerging for carrying out far-reaching airborne operations in connection with the fact that as a result of massive nuclear attacks the enemy's antiaircraft defense system will inevitably be disrupted.

The actions of the navy will be very important for achieving the aims of a nuclear-rocket weapons has sharply boosted its striking power. This has made possible a shift from the accomplishment of combat tasks which are carried out in cooperation with the land troops in coastal areas to independent and resolute actions in the vast space of the seas.

The nature and methods of armed struggle in the maritime theaters have also changed. The battles of squadrons and the artillery duels of battleships, cruisers, and other surface vessels have passed into history. The aircraft carrier which does not fire artillery shells but carries aircraft--a

new class of ship which has been promoted by the American and British military school--is also becoming obsolete. It has become vulnerable and can no longer play a decisive role in an armed struggle at sea in a nuclear war. Armed struggle on the sea--this implies above all actions of submarines, nuclear-rocket attacks by them on formations of naval forces, convoys, and naval bases and on important objectives on land as well as actions of the rocket-carrying air force and its nuclear strikes against the same targets. This contains the essence of an armed struggle on the sea in a thermonuclear war. This also is new phenomenon in the art of naval warfare.

The destruction of nuclear-propelled rocket submarine will be a primary task in the military actions in ocean and maritime theaters of war. The American press in every possible way extols its submarines with "Polaris" rockets and declares them invulnerable. But actually these ballistic rockets have essential shortcomings. The warheads have little power and the dependability and accuracy of the guidance system are low--a feature which results in low firing precision. The "Polaris" is rather vulnerable and can be fought successfully--which even the Americans themselves must admit. Rocket-carrying submarines can be destroyed in the areas in which they are based by strikes of the rocket troops, submarines, and airplanes.

Means of struggle such as nuclear-propelled antisubmarine-submarines, the air force, helicopters, and surface antisubmarine vessels are able to destroy an enemy submarine quickly once it has been detected. The American press notes that submarines are very susceptible to nuclear explosions underwater.

The destruction of the enemy's aircraft carrying assault formations constitute an important task in the armed struggle in the ocean and maritime theaters of war. They can be destroyed at the bases by nuclear strikes of the rocket troops, submarines, and the air force. Nuclear-propelled submarines with homing rockets and torpedoes and airplanes with "air-to-ship" rockets equipped with nuclear warheads are effective means of struggle against aircraft carriers and other surface ships. But the diesel-electric submarines with modern armaments also have not lost their importance.

There have also been essential changes in the methods of solving naval problems, such as the disruption of the enemy's naval communications, cooperation with one's own land troops, the landing of naval landing forces, coastal defense against landing forces, and the protection of communications.

Thus radical revolutionary changes have taken place in all major fields of military art. Since the possibility of the outbreak of a nuclear-rocket war cannot be excluded under current conditions, it is also necessary to work out and further assimilate the new military art, the art of waging a nuclear-rocket war.